

CLAIMS

1. A cell stimulating device which comprises: a first electrode serving as a positive or negative electrode that extends from one side of a culture vessel that is used for accommodating cultured cells to a point at which the first electrode is not in contact with the cultured cells or is in contact with the surfaces of the cultured cells; and a second electrode serving as a negative or positive electrode that extends from the other side of the culture vessel to a point at which the second electrode is not in contact with the cultured cells or is in contact with the surfaces of the cultured cells, wherein an electric field for stimulating cells is formed via the first electrode and the second electrode.

2. The cell stimulating device according to claim 1 which comprises: a first electrode serving as a positive or negative electrode that extends from either a top or a side portion of a culture vessel that is used for accommodating cultured cells to a point at which the first electrode is not in contact with the cultured cells or is in contact with the surfaces of the cultured cells; and a second electrode serving as a negative or positive electrode that extends from the other top or side portion of the culture vessel to a point at which the second electrode is not in contact with the cultured cells or is in contact with the surfaces of the cultured cells, wherein an electric field for stimulating cells is formed via the first electrode and the second electrode.

3. The cell stimulating device according to claim 1 or 2 wherein said first electrode is a circular ring electrode.

4. The cell stimulating device according to any of claims 1 to 3 wherein said second electrode is a single-point electrode.

5. The cell stimulating device according to any of claims 1 to 3 wherein said second electrode is a multi-point electrode that is a plurality of electrodes.

6. The cell stimulating device according to any of claims 1 to 3 wherein said second electrode is an electrode formed with mesh-sheet.

7. The cell stimulating device according to any of claims 1 to 3 wherein said second electrode is a sheet electrode comprising a multi-point electrode.

8. A method for electrically stimulating cells with the use of the cell stimulating devices of any of claims 1 to 7, wherein an electric field is formed by said first and second electrodes and cultured cells are stimulated in the electric field.

9. The method for electrically stimulating cells according to claim 8 wherein the cultured cells are nerve cells.